REMARKS

The Applicant appreciates the courteous and complete examination of the application by the Examiner. In view of the foregoing amendments and the following remarks, reconsideration of the application is respectfully requested.

Claims 1-22 are patentable under 35 U.S.C. 101.

In paragraph 1 of the Office Action, claims 1-22 were rejected by the Examiner under 35 USC § 101, because the Examiner was of the opinion that the claimed invention was directed to non-statutory subject matter because the claims are not tied to a statutory category (such as an apparatus) that accomplishes the method step nor do the claims transform the underlying subject matter (such as an article or material) to a different state or thing. The Examiner asserts that the claimed subject matter can be performed as mental steps by a person using paper and pencil rather than being inherently performed by an apparatus.

The method of the present invention involves industrial applicability and is not merely a mental act with no substantive outcome. Rather, the present invention defines a method for subdivision for a plot of land including forming an optimized sub-division of the plot of land by performing mathematical calculations to tessellate polygonal tile shapes over the area to be subdivided and thus results in a physical transformation of matter.

On page 5 of the specification of the present application, reference is made to United States Patent Nos. 3732649, 6470633, 5761857 and 5671570, all of which are provided as examples of prior art subdivision systems. United States Patent No. 3417526 discussed herein was not referred to in the subject specification by way of background prior art as it was not considered at that time to be relevant. However, it does disclose a simple tessellation method

using very simple plot configurations in a row housing configuration wherein the tessellation method could be performed in a manual operation in stark contrast to the tessellation method of the subject invention.

US 3417526 discloses a method of tessellating wineglass or similar shaped land subdivisions to obtain a more economical land usage (column 1, lines 8-52), being the same aim as the present invention, wherein the claims are directed to "a subdivided parcel of building land". In US 3417526, the primary aim is to allow more flexibility in house plan proportions and orientation. However, the tessellation method of US 3417526 is inefficient for the purpose of the present invention in that it is applied to row housing between parallel streets as seen in FIG. 6.

US 3732649 discloses a hybrid system for achieving higher utilization of land area. The claims are directed to "a housing arrangement for a pair of adjacent lots" however, the description is limited to a conventional row house subdivision as illustrated in FIG. 1. US 3732649 describes "a *housing arrangement wherein* each house *is placed on a* separate *city lot and is provided with a detached* garage *placed rearwardly of the house with a* separate *driveway running to the* garage" (column 2, lines 55-59).

US 6470633 discloses "a subdivision system" having a tessellation of circular building lots each accommodating four houses with a cruciform separating boundary pattern.

Each of the above deals with a method or system of subdividing a plot of land by the superimposition thereon of an array of regular property boundaries within which a building structure plan is predicated for each property subdivision. While the claims of the above prior art references are directed to "subdivisions", "systems" or "arrangements", each includes a detailed description of the method of achieving the claimed end result.

United States Patent 5671570 is directed to a "Lot Configuration and Building Position and Method for Residential Housing: and includes claims to "a method for locating buildings on adjacent lots....." and "a method for providing a residential subdivision....." as well as "in a residential subdivision, a plurality of adjacent contiguous....". Accordingly, not only is this patent protection for a method of subdivision of a plot of land implicit in certain of the US Patents under US contributory infringement rules, but support for the patentability of a method of subdivision of a plot of land is explicitly claimed in US Patent 5671570. Thus, US Patent 5671570 sets a precedent against which the allowability of "method of subdivision" claims should be considered.

It is respectfully submitted that the mere fact that claims 1-22 do not include a computer processor limitation should not alone preclude the claims from consideration. Whilst it could be argued that claims 1-22 include within their scope the possibility of manual performance of the method, this is considered impossible in practice as the aspects of "forming... a layout of a basic precinct unit" is not addressed in such an argument nor is the tessellation of the basic tile shapes to achieve a functional interrelationship addressed. The mere fact that claim 1 could include a nonsensical possibility should not of itself consign the claim to a category of a "mere scheme, rule or method of doing business performing purely mental acts...." when clearly the claim includes a novel combination of method steps. Therefore, the nonsensical construction should be disregarded. While it may be a simple manual task to tessellate polygonal tile shapes, it is by no means a simple manual/mental task to first form the layout on the basic tile shapes and then tessellate those tile shapes to achieve the required functionality.

The method of the present invention gives rise to an altered state of affairs and a variety of economic beneficiaries such as the architect, the land developer, local government authorities,

and land owners who all benefit from the efficiencies and practical benefits afforded by the invention.

The Examiner would no doubt be aware of the recent decision by the U.S Supreme Court in *Bilski v Kappos (U.S.,* No. 08-964, 6/28/10), in which it *was* established that the "machine-or-transformation" test is not the sole test for determining patentability. The present invention does not fall within the realm of unpatentable "abstract ideas". Rather, the present invention defines a method which includes tangible elements which result in a physical transformation of matter.

For the above reasons, withdrawal of the 35 U.S.C. 101 rejection of claims 1-22 is respectfully requested.

Claims 23-28 are patentable under 35 U.S.C. 102(b) over Showen (U.S. Publication 2002/0108346).

In paragraph 4 on page 3 of the Office Action, claims 23-28 were rejected under 35 USC 102(b) as being anticipated by Showen (US Publication No. 2002/0108346 Al). The rejection is respectfully traversed.

Respectfully, the aforementioned rejection under 35 USC 102(b) is unsustainable because Showen does not disclose, teach or suggest the features in independent claim 23. This will be further elucidated below.

Showen discloses a system or method of subdividing real estate consisting of a series of development circles connected together via alternating one-way streets such that, in the United States, traffic proceeds clockwise around the development circles and counter-clockwise around the traffic circles. Each development circle only has four homes, wherein each home faces 90

degrees away from the home on either side of it and has yard setbacks which increase toward the front of the home to provide more space and openness between homes.

The basic circular tile shape of Showen comprises an array of occupiable spaces and at least one access way communicating with each occupiable space. The basic tile shape comprises four quadrants, each quadrant providing an occupiable space, as illustrated in Fig. 1. The buildings in the centre vertical row of Fig. 1 show a single detached style construction and the three buildings in the left and the right rows of Fig. 1 show an attached style of construction.

The Applicant respectfully submits that the present invention as claimed is distinctly different from the invention taught by Showen. The prior art does not disclose, teach or suggest a method for sub-division of a plot of land comprising the step of computing a tessellation of polygonal basic tile shapes over an area to be subdivided such that "...each said basic precinct unit, together with an adjacent basic precinct unit forms an inter-tile unit of predetermined shape from two or more adjacent occupiable spaces, wherein the inter-tile unit links adjacent basic precinct units, as required by independent claim 23. Rather, the attached style of construction disclosed in Showen is formed from adjacent sub-tile shapes. The circular configuration of the basic tile shape of Showen does not enable an inter-tile unit to be formed from adjacent basic precinct units to maximise the amount of occupiable space with a subdivision. Thus, the present invention provides a method of subdivision which addresses the problems of the prior art recited in the background of the specification of the present application that arise with limited amounts of available land. These problems are not considered by Showen.

In view of the foregoing arguments, it is respectfully submitted that claims 23-28 are new and the Examiner's rejection under 35 USC 102(b) in paragraph 4 on page 3 of the Office Action has been traversed.

Claims 1-22 are patentable under 35 U.S.C. 103(a) over Flanders (U.S. Patent 6,688,052) in view of Adams (U.S. Patent 4,679,363).

In paragraph 12 on page 5 of the Office Action, claims 1-22 were rejected under 35 USC 103(a) as being unpatentable over Flanders (US Patent No. 6688,052) in view of Adams (US 4,679,363). The rejection is respectfully traversed.

The Examiner states that Flanders teaches *"...forming on a polygonal basic tiles shape a layout of a basic precinct unit comprising an array of occupiable spaces of predetermined shape, at least one access way communicating with each occupiable space..."*. The Examiner also states that Adams teaches *"forming an optimized sub-division of said plot of land by tessellating two or more said polygonal basic tile shapes over an area to be sub-divided whereby respective said at least one access way of each basic precinct unit connects with an access way of an adjacent basic precinct unit to form a network of connecting access ways, each said basic precinct unit, together with an adjacent basic precinct unit forming an inter-tile unit of predetermined shape from two or more adjacent occupiable spaces, said inter-tile unit linking adjacent basic precinct units to form a commercial or residential sub-division"*. The Examiner asserts that it would have been obvious to a person of ordinary skill in the art to combine the methods of forming an optimized sub-division shown in Adams with Flanders for the benefit of providing a land arrangement which preserves the environment and provided for large amounts of green space.

Adams discloses a township land arrangement in a circular configuration having a plurality of concentric circular roadways intersected by a plurality of radially extending roadways. Substantially curved land areas are positioned between these roadways in a spaced apart relationship.

While Adams discloses *"...forming an optimized sub-division of said plot of land by tessellating two or more said polygonal basic tile shapes over an area to be sub-divided whereby respective said at least one access way of each basic precinct unit connects with an access way of an adjacent basic precinct unit to form a network of connecting access ways...."*, Adams does not teach or suggest *"each said basic precinct unit, together with an adjacent basic precinct unit forming an inter-tile unit of predetermined shape from two or more adjacent occupiable spaces, said inter-tile unit linking adjacent basic precinct units to form a commercial or residential sub-division"*. Rather, each basic precinct unit in Adams is separated from an adjacent unit by a circular roadway instead of being linked to form an inter-tile unit, as required by claim 1.

Flanders discloses a neighbourhood housing arrangement comprising a perimeter road encircling the neighbourhood and blocks of residence having a u-shaped configuration placed so that the opening of the u-shape faces away from the perimeter road and having a plurality of resident buildings

It is respectfully submitted that none of the prior art documents, when considered alone or in combination with one another, teach or suggest a method for sub-division of a plot of land comprising the step of tessellating the polygonal basic tile shapes over an area to be subdivided such that each said basic precinct unit, together with an adjacent basic precinct unit forms an inter-tile unit of predetermined shape from two or more adjacent occupiable spaces, wherein the inter-tile unit links adjacent basic precinct units, as required by independent claim 1.

In the event that a person of ordinary skill in the art combined Adams and Flanders, they would not arrive at the method for sub-division of a plot of land claimed in claims 1-22. These claims would not therefore have been obvious to a person of ordinary skill in the art. The prior art does not seek to address the problem solved by the present invention as discussed in the

background of the specification of the present application. Therefore, it would not be obvious to a person of ordinary skill in the art to derive the present invention from the teachings of Adams and Flanders.

It is possible to test the obviousness of the present invention with reference to the Graham factors. Firstly, it is necessary to look at the scope and content of the prior art. It is clear that the prior art fails to teach or suggest a method for sub-division of a plot of land, as recited in amended independent claims 1 and 23 respectively.

The second Graham factor requires resolution of ordinary skill in the art. It is acknowledged that the person of ordinary skill in the art would be capable of understanding the prior art, applying known techniques and common general knowledge to produce a known device, substituting elements to achieve a better result, and being led by a teaching, suggestion or motivation in the prior art to combine elements of the prior art. However, the person of ordinary skill in the pertinent art would not be capable of making the inventive step required derive a method for sub-division of a plot of land comprising the step of *"forming an optimized sub-division of said plot of land by tessellating two or more said polygonal basic tile shapes over an area to be sub-divided whereby respective said at least one access way of each basic precinct unit connects with an access way of an adjacent basic precinct unit to form a network of connecting access ways, each said basic precinct unit, together with an adjacent basic precinct unit forming an inter-tile unit of predetermined shape from two or more adjacent occupiable spaces, said inter-tile unit linking adjacent basic precinct units to form a commercial or residential sub-division"*, as claimed. Further, there is no teaching, suggestion or motivation in the prior art to make this inventive step. It is clear the invention defined by the amended independent claims is novel and inventive.

The third Graham factor requires ascertainment of the differences between the claimed invention and the prior art. It is clear that the invention defined by amended independent claims 1 and 23 differs from the teachings of the prior art by requiring an inter-tile unit to be formed from two or more adjacent occupiable spaces between adjacent basic precinct units. The present invention further requires the inter-tile unit linking the adjacent basic precinct units to form a commercial or residential sub-division.

In providing objective evidence of non-obviousness with respect to the fourth Graham factor, the invention defined by the amended independent claims has the significant advantage of providing a method for sub-division of a plot of land which maximizes the occupiable space within a parcel of land. These advantages could not have been predicted by a skilled person based on the teachings of the prior art and the common general knowledge.

In view of the foregoing arguments, it is respectfully submitted amended independent claims 1 and 23 and their respective dependent claims are new and non-obvious. In particular, claims 1-22 are new and non-obvious and the Examiner's rejection under 35 USC 103(a) in paragraph 12 on page 5 of the Office Action has been traversed.

In conclusion, the features of each of claims 1-28 are not disclosed, suggested or rendered obvious to a person of ordinary skill in the art by the prior art of record and the claims particularly point out and distinctly claim the subject matter regarded by the applicant as the invention.

In light of the above submission, the Applicant considers the rejections to be addressed. Accordingly, it is respectfully submitted that the application is now in condition for allowance.

CONCLUSION

Reconsideration and allowance are respectfully requested.

Respectfully,

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